

Mineral Industry Surveys

For information, contact:

James F. Carlin, Jr., Tin Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4985, Fax: (703) 648-7757
E-mail: jcarlin@usgs.gov

Elsie D. Isaac (Data)
Telephone: (703) 648-7950
Fax: (703) 648-7975
E-mail: eisaac@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

TIN IN NOVEMBER 2004

Domestic consumption of primary tin in November was estimated to be about 2% higher than in October 2004 and 6% higher than that in November 2003, according to the U.S. Geological Survey. Estimated domestic consumption of primary tin in the first 11 months of 2004 was 2% higher than that for the comparable period of 2003. The leading tin importers to the United States in the first 10 months of 2004 were, in descending order: Peru, Malaysia, China, Indonesia, Bolivia, and Brazil.

The Platts Metals Week average composite price for tin in November was \$5.80 per pound, just slightly above that in October 2004 and 59% higher than the price in November 2003. The tin price has only moved in a relatively narrow band for much of the second half of 2004. However, the tin price at the end of November was more than 40% higher than at the start of the year. That represents a bigger gain than any of the other metals traded on the London Metal Exchange. In response to the surging price, tin production increased markedly in 2004. China's State Statistical Bureau reported that the country produced 82,600 metric tons (t) of refined tin in the first 9 months of the year, up 20% from that of the same period of 2003. Indonesia, the world's second leading refined tin producer, will probably produce somewhat less tin than the 64,800 t it produced in 2003. Elsewhere in Asia, production has risen strongly in both Malaysia and Thailand, especially the former, where an easing of raw material availability allowed Malaysia Smelting Corp. to produce almost 10,000 t more tin than the 18,300 t it produced in 2003. Global demand was estimated to have increased by more than 7% in 2003, largely reflecting soaring demand in China. Demand was forecast to rise at around the same rate in 2004 before slowing to just over 3% in 2005 (Mining Journal, 2004).

Brazil's tin metal exports rose 44% to 4,800 t during the first 10 months of 2004 compared with that of the same period of 2003. Brazil's output of tin-in-concentrates showed modest growth of 3% to 10,400 t, owing to an expansion of mining activities at its Bom Futuro Mine by the Coopersanta Cooperative. Coopersanta's output of 2,200 t of tin-in-concentrates during the 10-month span was more than double

that of a year earlier, confirming the cooperative's ranking as Brazil's second leading tin miner. Meanwhile, mine output from Grupo Paranapanema, the leading producer, fell 17% to 6,000 t in the 10-month period because of the apparent exhaustion of the richer alluvial ore deposits at its Pitinga Mine. Similarly, falling reserves also affected output at the Santa Barbara Mine operated by Cia. Estanifera Brasileira SA (Cesbra), formerly Brazil's second leading producer, where production fell 30% to 663 t. Brazil's tin metal output in the 10-month period totaled 9,700 t, up 8% from that of the comparable 2003 period (American Metal Market, 2004).

Paranapanema SA's sale of bauxite mineral rights at its Pitinga property in north Brazil to Companhia Vale do Rio Doce (CVRD) was scheduled to be finalized in the winter of 2004-2005. CVRD was to pay the equivalent of \$20 million cash for the rights, helping Paranapanema finance completion of its new tin/tantalum project at the same location. Work on the new hardrock mine was to be completed by 2006. Paranapanema was also considering an increase in tin production by its Mamore division at Pitinga to 12,000 metric tons per year (t/yr) from current production of 7,500 t/yr (CRU Week in the News, 2005§¹).

Liuzhou China Tin Group produced 12,800 t of refined tin in 2004, about 15% lower than its 2003 output. The decline was attributed to ore shortages, with the company mining just 6,500 t of low grade ore in the Nandan area of southwest China. The Guangxi Government, which owned Liuzhou China Tin, was conferring with China Minmetals about a possible sale of Liuzhou (CRU Week in the News, 2005§).

Australia's Bluestone Tin agreed to buy another tin project in Tasmania to complement the Renison Bell Mine, which was to restart production in January 2005. Bluestone, which bought Renison in 2003 from its operating company's administrators, agreed to purchase the closed Mount Bischoff tin mine at Waratah, northwest Tasmania, from a private vendor. The Mount Bischoff Mine, located 80 kilometers north of Renison

¹A reference that includes a section mark (§) is found in the Internet Reference Cited section.

Bell, last operated in 1921, having produced 5.5 million metric tons of tin ore containing about 1% tin during its operating life. Bluestone planned to re-establish the mine immediately and to begin open pit mining within a year (Metal Bulletin, 2004). Indonesia reported somewhat lower tin mine production in 2003 compared with that of the prior year. The two leading producers were PT Timah Tbk and PT Koba Tin, both of which operated on Bangka Island. Total output in 2003 was 71,700 t of tin-in-concentrate, down from a record high of 79,800 t in 2002. In 2003, Timah's tin-in-concentrate output reached 44,000 t, of which 35,400 t was produced from inland deposits (gravel pump operations) and 8,550 t from dredge operations. The 37% decline in output from Timah's dredging operation was a result of the company's policy of conserving its offshore reserves and optimizing its inland production. Koba's tin-in-concentrate production for 2003 was 27,000 t. Tin metal production from Timah's Mentok smelter in 2003 was 45,900 t, a 5% increase over that of 2002 (Mining Journal, 2004).

Update

On December 24, the Platts Metals Week composite price for tin was \$5.28 per pound.

References Cited

American Metal Market, 2004, Brazil's tin exports up in step with higher demand: American Metal Market, v.112, no. 49-3, December 8, p. 6.
Metal Bulletin, 2004, Bluestone buys Tasmanian tin mine: Metal Bulletin, no. 8871, December 6, p. 15.
Mining Journal, 2004, Fundamental outlook for tin: Mining Journal, November 19, p. 4.

Internet Reference Cited

CRU Week in the News, 2005 (January 6), Tin, accessed January 6, 2005, via URL <http://www.crumonitor.com>.

TABLE 1
SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

	2004			
	2003	October	November	January- November
Production, secondary ^{e,2}	7,880	900	900	9,900
Consumption:				
Primary	32,900	3,190 ^r	3,250	34,900
Secondary	4,490	680	677	7,520
Imports for consumption, metal	37,100	3,490	NA	NA
Exports, metal	3,690	344	NA	NA
Stocks at end of period	7,950	5,900 ^r	6,350	XX
Prices (average cents per pound): ³				
Metals Week composite ⁴	339.84	578.10	580.02	XX
Metals Week New York dealer	232.36	436.62	437.62	XX
London, standard grade, cash	222.00	410.00	411.00	XX
Kuala Lumpur	221.67	407.30	408.48	XX

^eEstimated. ^rRevised. NA Not available. XX Not applicable.

¹Data are rounded to no more than three significant digits, except prices.

²Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

³Source: Platts Metals Week.

⁴The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE¹

(Cents per pound)

Period	High	Low	Average
2003:			
November	373.73	356.40	364.20
December	437.61	378.77	404.65
Year	437.61	303.14	339.84
2004:			
January	439.98	424.94	432.53
February	456.45	429.49	442.15
March	549.13	459.43	495.71
April	596.03	561.93	575.65
May	624.98	575.07	592.12
June	622.44	568.24	589.38
July	583.13	565.64	576.07
August	590.50	563.04	573.74
September	585.04	566.00	576.55
October	586.56	568.98	578.10
November	584.93	570.24	580.02

¹The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

Source: Platts Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES¹

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments ²
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2003	W	2,510,000	7,790	3.1	2,190,000
2004:					
January	W	210,000	657 ^r	3.1 ^r	167,000
February	W	197,000 ^r	623 ^r	3.2 ^r	169,000
March	2,720	189,000 ^r	565 ^r	3.0	188,000
April	W	190,000 ^r	625 ^r	3.3	168,000
May	W	192,000 ^r	612	3.2	148,000
June	W	190,000 ^r	607	3.2	188,000
July	W	191,000	902	4.7	174,000
August	W	195,000 ^r	597	3.1	168,000
September	W	195,000 ^r	623 ^r	3.2 ^r	154,000
October	W	199,000 ^r	628 ^r	3.1 ^r	163,000
November	W	204,000	675	3.3	NA

^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data.

¹Data are rounded to no more than three significant digits.

²Source: American Iron and Steel Institute monthly publication.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS¹

(Metric tons)

Country or product	2003	2004		
		September	October	January- October
Imports:				
Metal (unwrought tin):				
Bolivia	5,720	396	40	3,970
Brazil	3,000	519	599	3,610
Chile	636	--	--	200
China	4,340	513	398	4,570
Indonesia	3,070	621	100	4,500
Japan	136	360	--	540
Malaysia	490	--	805	4,890
Peru	19,100	1,060	1,490	15,700
Switzerland	(2)	--	--	178
Thailand	--	40	60	420
United Kingdom	143	2	--	77
Other	426	111	3	472
Total	37,100	3,620	3,490	39,100
Other (gross weight):				
Alloys	3,820	441	386	4,330
Bars and rods	338	50	62	531
Foil, tubes, pipes	4	(2)	--	3
Plates, sheets, strip	270	42	62	457
Waste and scrap	921	91	479	1,210
Miscellaneous	2,670	578	396	2,810
Total	8,030	1,200	1,390	9,340
Exports (metal)	3,690	248	344	3,080

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT¹

(Metric tons of contained tin)

Product	2004							
	2003	October			November			January- November
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) ²	W	252 ^r	W	252 ^r	246	W	246	2,540
Babbitt	2,570	36	W	36	24	W	24	197
Bar tin and anodes	849	12	W	12	11	W	11	131
Bronze and brass	2,600	99	105	204	93	102	195	2,290
Chemicals	8,720	704	W	704	704	W	704	7,740
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	10,600	741	265	1,010	779	265	1,040	11,600
Tinning	833	38 ^r	--	38 ^r	37	--	37	430
Tinplate ³	7,790	628 ^r	--	628 ^r	675	--	675	6,780
Tin powder	W	W	--	W	W	--	W	W
White metal ⁴	W	W	--	W	W	--	W	W
Other	2,180	79	10	89	79	10	89	855
Total reported	37,400	2,590 ^r	380	2,970 ^r	2,650	377	3,030	32,500
Estimated undistributed consumption ⁵	--	600	300	900	600	300	900	9,900
Grand total	37,400	3,190 ^r	680	3,870 ^r	3,250	677	3,930	42,400

^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes terne metal.

³Includes secondary pig tin and tin components of tinplating chemical solutions.

⁴Includes pewter, britannia metal, and jewelers' metal.

⁵Estimated consumption of plants reporting on an annual basis.